

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the captioned patent application:

Listing of Claims:

1. (Currently Amended) A method of fitting an auditory stimulation system having a plurality of channels to a recipient, the method comprising: the steps of:

establishing an initial current level profile representative of comprising a current level setting spanning across for each of at least some of the plurality of channels ;

applying stimulation using the initial current level profile;

obtaining a response to the applied stimulation; and

adjusting a plurality of the current level settings parameters of the initial current level profile based on the obtained response in the presence of a stimulation signal.

2. (Currently Amended) A method of fitting an auditory stimulation system of claim 1wherein adjusting the plurality of corrected levels comprises: further comprising the step of:

determining the desired parameters representative of an optimum current level profile corresponding to adjusting the plurality of current level settings so that they are representative of a recipient's threshold and/or maximum comfort current level profile.

3. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 1 further comprising: the step of:

establishing the initial current level profile from measurements of the ECAP thresholds for each or at least some of the channels of the auditory stimulation system, and establishing a current level profile based upon the measurements.

4. (Currently Amended) A method of fitting an auditory stimulation system in claim 1 further comprising: the step of

establishing the initial current level profile from measurements of the ECAP thresholds for at least one channel of the auditory stimulation system, with the full profile being interpolated from the measurements.

5. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 1 further comprising: the steps of

establishing the initial current level profile by performing a statistical analysis of recipient mapping data over a number of recipients and subsequently using this analysis to form an initial current level profile for a particular recipient.

6. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 1 further comprising: the steps of

establishing the initial current level profile by performing psychophysical measurements of the recipient in combination with statistical analysis of recipient mapping data over a number of recipients, and thereby determine a suitable initial current level profile for a particular recipient.

7. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 1 wherein the parameters adjusting a plurality of the current level settings of the initial current level profile results from the current level profile being adjusted to include one or a combination of shift, tilt and curvature.

8. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 7 wherein the resulting shift parameter is adjusted effected by adding/subtracting a fixed amount of current level from each individual channel in the profile.

9. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 7 wherein the resulting tilt parameter is adjusted effected by adding/subtracting a derived amount of current level from each individual channel in the profile.
10. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 7 wherein the resulting curvature parameter is adjusted effected by adding/subtracting a derived amount of current level from each individual channel in the profile in a non-uniform manner.
11. (Original) A method of fitting an auditory stimulation system as claimed in claim 9 wherein the amount of current added/subtracted from each individual channel varies dependent upon whether the channel is positioned in a basal region or in an apical region of the cochlea.
12. (Original) A method of fitting an auditory stimulation system as claimed in claim 11 wherein the current level for channels positioned in the apical region of the cochlea is increased and the current level for channels positioned in the basal region of the cochlea is decreased a derived amount.
13. (Original) A method of fitting an auditory stimulation system as claimed in claim 11 wherein the current level for channels positioned in the apical region of the cochlea is decreased and the current level for channels positioned in the basal region of the cochlea is increased a derived amount.
14. (Original) A method of fitting an auditory stimulation system as claimed in claim 1 wherein the stimulation signal is derived from a broadband sound signal.
15. (Original) A method of fitting an auditory stimulation system as claimed in claim 14 wherein the broadband sound signal is a live speech signal.

16. (Original) A method of fitting an auditory stimulation system as claimed in claim 14 wherein the broadband sound signal is an artificial signal.
17. (Original) A method of fitting an auditory stimulation system as claimed in claim 14 wherein the broadband sound signal is a recorded signal.
18. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 1 wherein the step of adjusting a plurality of current level settings parameters of the initial current level profile in the presence of a stimulation signal includes adjusting adding a fixed amount of current level to each current level setting shift parameter of the initial current level profile until the stimulation signal can just be detected by the recipient, indicative of the stimulation reaching a threshold level.
19. (Currently Amended) A method of fitting an auditory stimulation system as claimed in claim 16 18 wherein following establishing the stimulation has reached a threshold level, a predetermined amount of current level is added to a current level setting of at least a first channel of the plurality of channels and the predetermined amount of current level is subtracted from at least a second current level setting of a channel of the plurality of channels the tilt parameter of the current level profile is adjusted until an optimal threshold level is perceived by the recipient.
20. (Currently Amended) A programming apparatus adapted to be interfaced with an auditory stimulation system having a plurality of channels to allow manipulation of threshold (T) and comfort (C) levels of the system, the programming apparatus comprising: a graphical display means adapted to display a graphical representation of the a current level profile of the channel array having a plurality of channels; and means for adjusting a current level setting of at least two channels of the plurality of channels based on an obtained response to alter the current level profile of the channel array.

21. (Original) A programming apparatus as claimed in claim 20 wherein an initial current level profile representative of the current level setting spanning across at least some of the plurality of channels is established.
22. (Currently Amended) A programming apparatus as claimed in claim 21 wherein parameters of the means for adjusting the current level setting of at least two channels comprises a means for adjusting the current level setting of the at least two channels to alter the initial current level profile are-adjusted in the presence of a stimulation signal.
23. (Original) A programming apparatus as claimed in claim 22 wherein the initial current level is established from measurements of the ECAP thresholds for each or at least some of the channels of the auditory stimulation system, and a current level profile is established based upon the measurements.
24. (Original) A programming apparatus as claimed in claim 22 wherein the initial current level profile is established from measurements of the ECAP thresholds for at least one channel of the auditory stimulation system, with the full profile being interpolated from the measurements.
25. (Original) A programming apparatus as claimed in claim 22 wherein the initial current level profile is established by performing a statistical analysis of recipient mapping data over a number of recipients, the analysis subsequently being used to form the initial current level profile for a particular recipient.
26. (Original) A programming apparatus as claimed in claim 22 wherein the initial current level profile is established by performing psychophysical measurements of the recipient in combination with statistical analysis of recipient mapping data over a number of recipients, thereby determining a suitable initial current level profile for a particular recipient.

27. (Currently Amended) A programming apparatus as claimed in claim 22 wherein the parameters means for adjusting a current level setting of at least two channels comprises means for effecting a change in the current level profile by of the initial current level profile being adjusted include one or a combination of shift manipulation, tilt manipulation and curvature manipulation.
28. (Currently Amended) A programming apparatus as claimed in claim 27 wherein the shift manipulation parameter is adjusted effectuated by adding/subtracting a fixed amount of current level from each individual channel in the profile.
29. (Currently Amended) A programming apparatus as claimed in claim 27 wherein the tilt parameter manipulation parameter is adjusted effectuated by adding/subtracting a derived amount of current level from each individual channel in the profile.
30. (Currently Amended) A programming apparatus as claimed in claim 27 wherein the curvature manipulation parameter is adjusted effectuated by adding/subtracting a derived amount of current level from each individual channel in the profile in a non-uniform manner.
31. (Original) A programming apparatus as claimed in claim 29 wherein the amount of current added/subtracted from each individual channel varies dependent upon whether the channel is positioned in a basal region or in an apical region of the cochlea.
32. (Original) A programming apparatus as claimed in claim 31 wherein the current level for channels positioned in the apical region of the cochlea is increased and the current level for channels positioned in the basal region of the cochlea is decreased a derived amount.
33. (Original) A programming apparatus as claimed in claim 31 wherein the current level for channels positioned in the apical region of the cochlea is decreased and the current level for channels positioned in the basal region of the cochlea is increased a derived amount.

34. (Original) A programming apparatus as claimed in claim 22 wherein the stimulation signal is derived from a broadband sound signal.

35. (Original) A programming apparatus as claimed in claim 34 wherein the broadband sound signal is a live speech signal.

36. (Original) A programming apparatus as claimed in claim 34 wherein the broadband sound signal is an artificial signal.

37. (Original) A programming apparatus as claimed in claim 34 wherein the broadband sound signal is a recorded signal.

38. (Currently Amended) A programming apparatus as claimed in claim 22 wherein the adjusted parameters current level settings are adjusted by adding a fixed amount of current to each channel in the plurality of channels include the shift parameter of the initial current level profile, which shift parameter is adjusted until the stimulation signal can just be detected by the recipient, indicative of the stimulation reaching a threshold level.